EQUIPMENT FOR MILK PRODUCTS

Typing errors possible. The information in the catalogue is subject to change.
Photos and drawings for illustrative purposes.

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UNIVERSAL CUTTING AND MIXING MACHINE



The machine is designated for production of different products – melted cheese, dairy creams, pates, mayonnaise, ketchup, baby food, chocolate fillings, surimi, emulsions, marmalade and other products made on analogue recipes.

The standard machine consists of thermo-insulated vessel, where stirring unit and three cutter knives cut and mix the components. Speed of stirrer and of knives can be smoothly adjusted.

Vessel inner surface is made of polished acid-resistant stainless steel, which makes the cleaning easier. The vessel is offered with net volume 80 and 150 L. Linear drive allows working at 30° angle and vessel tilting and emptying.

The lid opens/closes also with linear drive and during working process it is fixed with screw clamps (optional automatic pneumatic locking). For better sealing during working is used airseal.

Machine control unit is Delta with touch screen, allowing various settings and saving a large number of recipes. As an option the machine is offered with Siemens controller.

A column lifter for loading of the raw material (check Additional equipment, for 150l – art. number 3120031635) or a buffer tank for the ready product (check Additional equipment, art. number 62401958) can be offered for the machine.

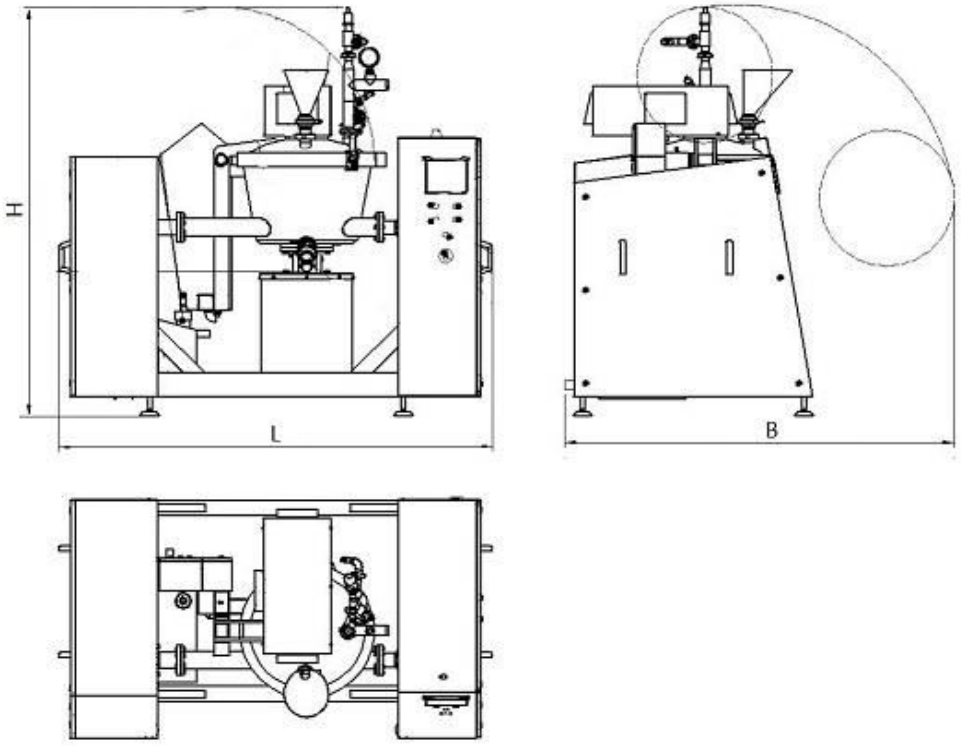
All machine parts in contact with the product are made of acid-resistant stainless steel AISI 316 and the other machine parts – of AISI 304. The machine complies with the Council Directives 2006/42/EC and 2006/95/EC, and USDA regulations.

Depending on the product the machine can be equipped with:

- steam jacket for product cooling or heating;
- vacuum pump 25 m³/h (Speck);
- direct steam injecting;
- manual valve for emptying DN65;
- pneumatic valve for emptying DN65;
- pneumatic cover locking;
- steam equipment.

Technical data:

Art. numbers	61.2410.08	61.2410.15
Net volume	80 l	150 l
Knife speed	300-3000 rpm/min	300-3000 rpm/min
Mixer speed	10-70 rpm/min	10-70 rpm/min
Installed power	22 kW	35 kW
Connections - electricity/steam/ compressed air	3x400 V/50 Hz/ 3 bar, 130°C/ 6 bar, Ø8	3x400 V/50 Hz/ 3 bar, 130°C/ 6 bar, Ø8



Dimensions:

Art. numbers	61.2410.08	61.2410.15
Length	2240 mm	2365 mm
Width when working	1280 mm	1455 mm
Width when tilted	2015 mm	2255 mm
Height	1700 mm	1955 mm
Height with open cover	2110 mm	2505 mm

CUTTING OF CHEESE WITH FIXED WEIGHT

SPECIALIZED PRODUCTION LINE FOR CUTTING OF CHEESE WITH FIXED WEIGHT, 6130101000

The machine is designated for cutting of rectangular blocks cheese and brined cheese into pieces with fixed weight. The production line is module one and consists of Machine for cutting in fixed weight and checkweigher with rejecter.

The rectangular block is placed on conveyor belt with scale. After measuring its weight the block is transported to the cutting guillotine. During movement the shape and dimensions of the block are measured by laser scanners. Taking the results of the scanners, microprocessor calculates the thickness of each slice, which should be cut from the guillotine. After the cutting each slice falls to a checkweigher and if there is deviation from the specified weight, it's removed by a rejecter.

The machine for cutting consists of conveyor; scale with polyurethane belt (manual and automatic scale reset); conveyor for positioning of the blocks with polyurethane belt; 3d scanning with laser sensors; cutting mechanism with teflonized guillotine blade, driven by servo motor, unit for holding the block during cutting and outgoing conveyor.

From the outgoing conveyor the slices are transported to checkweigher with rejecter. This part consists of three conveyors and the weighing is dynamic (manual and automatic scale reset).

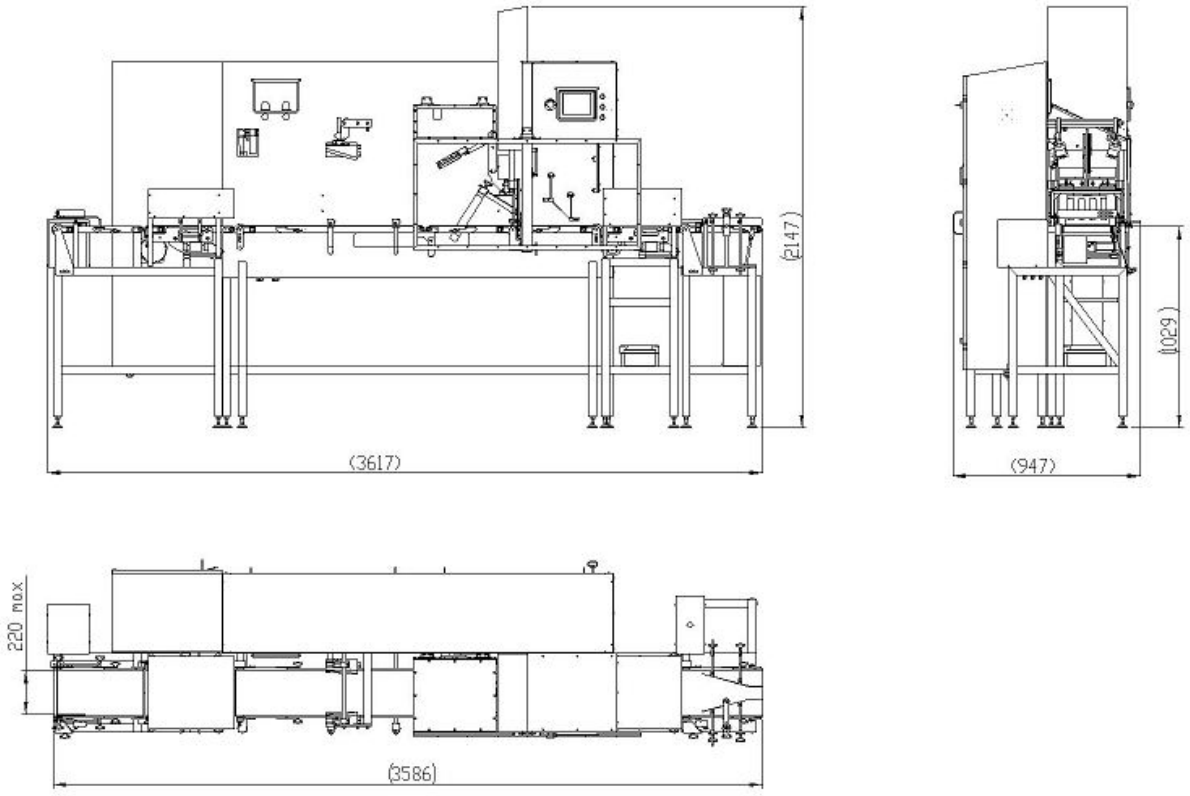
The control unit is Delta with touch screen with software, specially programmed for the machine, illustrating the process, saving and launching of programs.

The machine is made of stainless steel AISI 316 and the construction is designed for easy cleaning.



Technical data:

Capacity	up to 60 slices/min (depends on the weight)
Slices weight	from 150 up to 1000 g
Max. block dimensions /to be negotiated/	400x220x150 mm
Power supply	3 x 400 V, 50 Hz
Installed power	5 kW
Compressed air	Ø 6 mm
Scale range entering conveyor	up to 6000 g (accuracy 0,5 g)
Checkweigher	up to 1000 g (accuracy 0,2 g)



Dimensions:

Length	3620 mm
Width	950 mm
Height	2150 mm

Machine complies with the Directive for nominal quantities for prepackaged products:

Nominal quantity (Qn, Vn) in grams or milliliters	Max. deviation	
	%	grams or milliliters
from 5 up to 50	±9	-
from 50 up to 100	-	±4,5
from 100 up to 200	±4,5	-
from 200 up to 300	-	±9
from 300 up to 500	±3	-
from 500 up to 1000	-	±15
from 1000 up to 10 000	±1,5	-

CUTTING MACHINE FOR CHEESE AND BRINED CHEESE



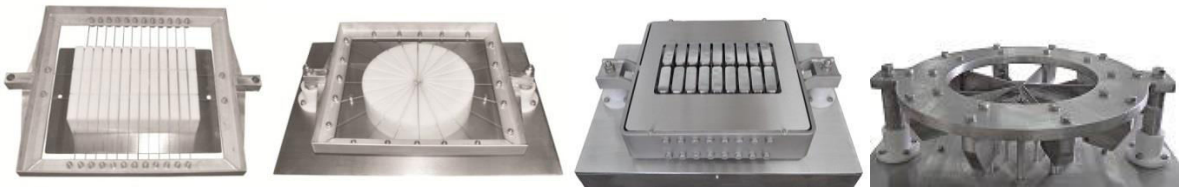
The machine is designated for cutting of round or rectangular blocks cheese or brined cheese into pieces with certain dimensions and configuration. Depending on the product the cutting tool is equipped with strings (61.2736.11) or with knives (61.2736.12).

The cutting tool form, the number of the cut pieces, is manufactured following the customers' requirements. One machine can work with different cutting tools and their change is easy and takes about 3-4 min.

Only after pushing both handles (safety) pneumatic cylinder drives the cutting tool down.

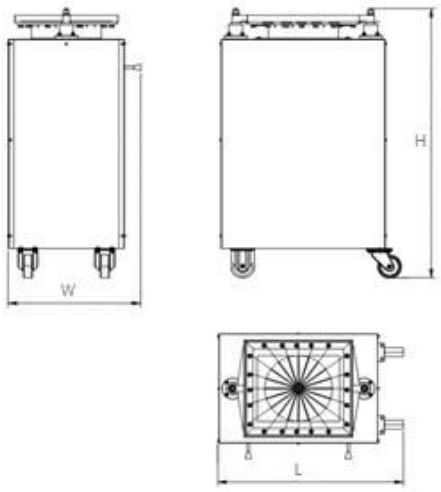
The machine is made of stainless steel 1.4301 (AISI 304).

On request, the machine can be offered for cutting of variety of block sizes and cutting configurations, as well as for cutting of other food products (for example energy bars).



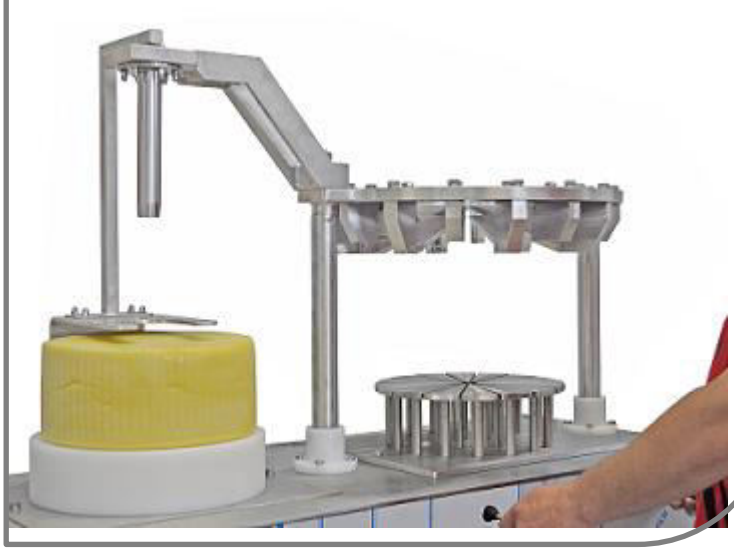
Technical data:

Max. block dimensions	Ø 300 mm	Ø 400 mm	500x300 mm
Max. block height	150 mm	150 mm	150 mm
Working pressure	max. 0,6 MPa	max. 0,6 Mpa	max. 0,6 MPa
Air consumption (exemplary)	8 l/cycle	8 l/cycle	8 l/cycle
Dimensions	805x570x1200-1520 mm	905x670x1200-1520 mm	955x570x1200-1520 mm



COMBINED CHEESE CUTTING MACHINE, 6210250005





The machine is a combination of two cutting instruments with knives. The first one is for cutting out the center of block and the second one for cutting the block into certain number of pieces.

The operator places the cheese block on the place for cutting out the middle and after that on the place for cutting into pieces. The cut middle is automatically pushed out of the spherical blade.

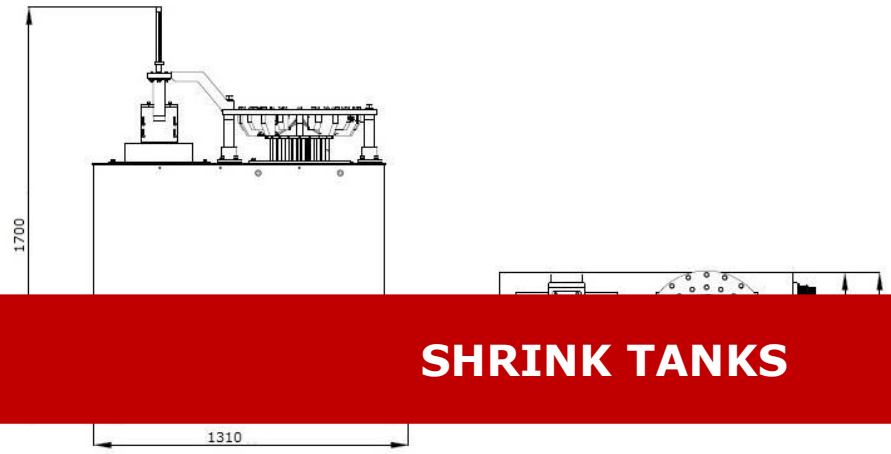
The drive of both instruments is simultaneous and is made by pneumatic cylinder.

The form of the cutting instruments, i.e. the pieces number, is designed according clients' wishes. One machine can work with several cutting instruments and their change is easy and takes about 3-4 min.

The machine is made of stainless steel 1.4301 (AISI 304).

Technical data:

Working pressure	max. 0,6 MPa
Cheese diameter	280 mm
Max. cheese height	120 mm
Diameter of the cut middle	50 mm
Overall dimensions	1310x570x1700 mm



SHRINK TANKS

SHRINK TANK, 62.5112.01

The machine is designed for packing of food products with shrink film by immersing in hot water.

The product, already packed in shrink packaging, is placed on the board and after activation it immerses in the tank with hot water for period of time sufficient to wrap the product in foil and to obtain high quality packaging. Time for shrinking and water temperature can be adjusted.

Water heating in tank is performed by electrical heaters. For the bigger soils the machine is equipped with filter.

The tank is equipped with aspiration hood, but it can be delivered also without it.

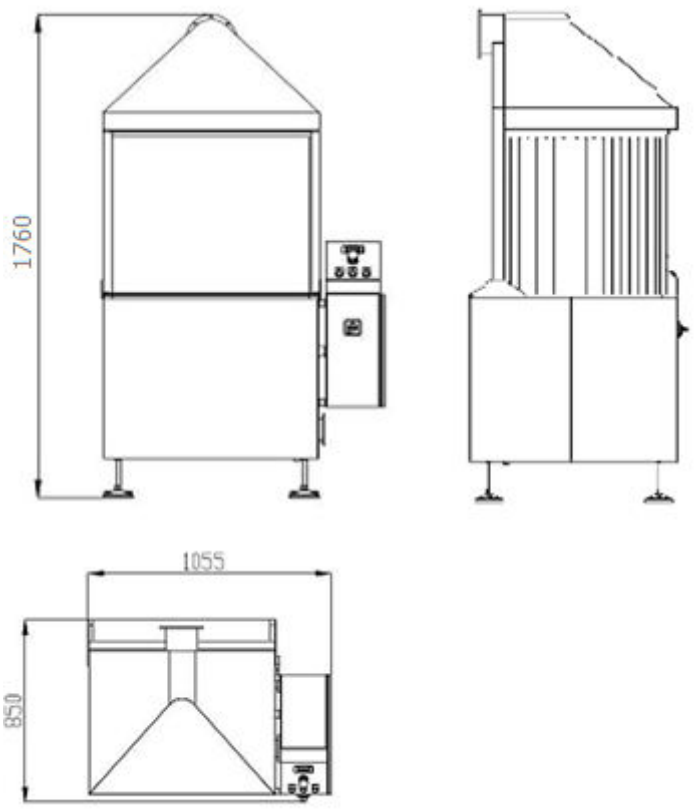
The board drive is performed by pneumatic cylinder.

The machine is made of stainless steel 1.4301 (AISI 304) and complies with the Council Directives 2006/42/EC and 2006/95/EC, and USDA regulations.



Technical data:

Board size	685x585 mm
Max. product weight	50 kg
Installed power	27,1 kW
Power supply	3x400V/50 Hz
Heating	3x9 kW
Air supply	5-6 bar



Dimensions:

Length	1055 mm
Weight	850 mm
Height	1760 mm

SIMILAR

Shrink tank
62.5110.01

- no aspiration hood.



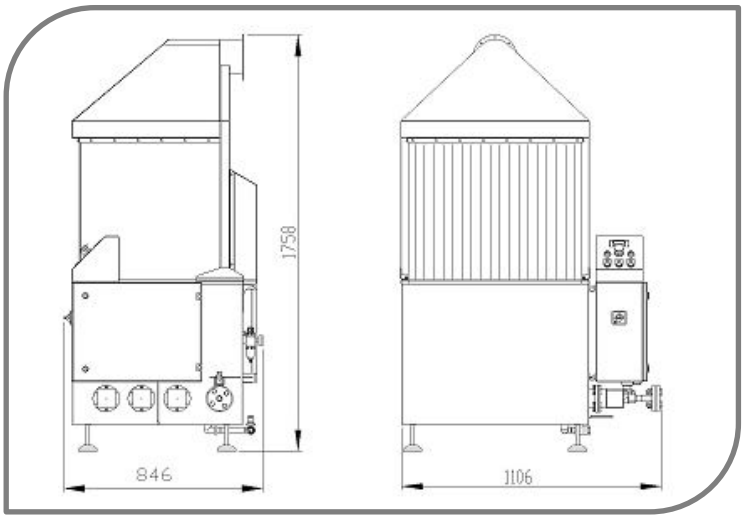
Technical data:

Board size	685x585 mm
Max. product weight	50 kg
Installed power	27,1 kW

Connections – electricity, air	3x400V/50 Hz / 5-6 bar
Dimensions	1055x850x1215 mm

Shrink tank
6321100000

- with aspiration hood;
- with combined heating – steam and electricity.



Technical data:

Board size	685x585 mm
Max. product weight	50 kg
Dimensions	1110x846x1760 mm

DOSING UNITS FOR PASTA PRODUCTS

DOSING UNIT FOR PASTA PRODUCTS, 61.2734.00

This machine is used for dosing of food-processing industry products with high viscosity /jams, creams, sauces, salads, etc./.

It is designated for work in small and middle-size industries.

Maximum volume of dosed product is up to 100 ml (according to the customers' request could be made up to 1000 ml.) and dosing accuracy is up to 2 ml.

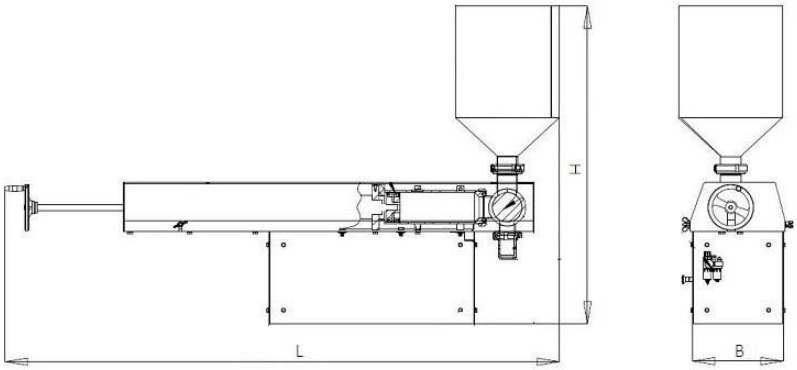
Hopper volume is about 11 l. The dosing group is detachable, which allows fast and efficient cleaning.

Dose of the product and dosing speed are adjustable. The machine is made of stainless steel 1.4301 (AISI 304).



Technical data:

Max. dosing volume	100 ml
Hopper capacity	11 l
Working pressure	6 bar
Dimensions	920x855x290 mm



SIMILAR

Dosing unit for past products 61.2734.10



FILLING LINE FOR PEPPERS WITH CURDS

Working pressure	6 bar
Dimensions	1500x855x310 mm

FILLING LINE FOR PEPPERS WITH CURDS, 6821040200

The line is semi-automatic and is designed for filling peppers with curds. It has four working places and consists of conveyor belt, trolley hopper, pump for raw material feeding and control units.

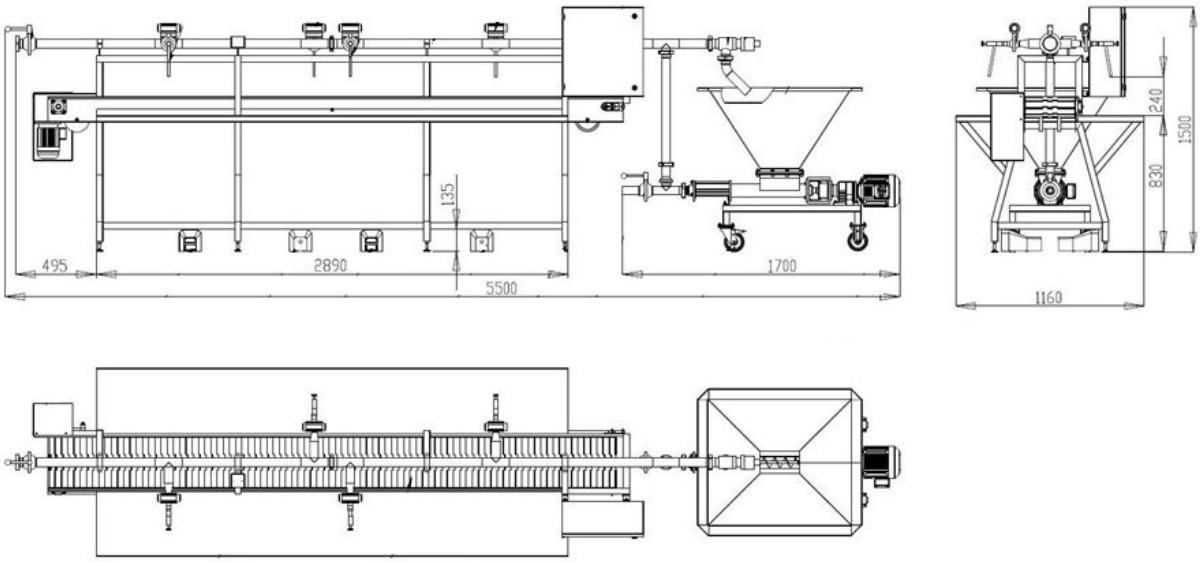
After filling of hopper with material and starting the process, the raw material reaches the working places through the pipeline. The rotational speed of the pump is adjustable. Peppers filling is manual and is performed by pneumatic valve controlled from foot pedal. After filling of the peppers they are placed on conveyer for further transportation. Gear motor ensures right and safe movement. When needed a safety valve on the end of the pipeline returns the unused product to the hopper.

All machine parts in contact with the product are made of acid-resistant stainless steel AISI 316 and the other parts of stainless steel 1.4301 (AISI 304). The line complies with the standard BS EN 1672-2: 2005 + A1: 2009 and HACCP.



Technical data:

Power supply	3x400V/50 Hz
Control voltage	24 V DC
Installed power	1,8 kW
Air pressure	7,5-7,8 bar



Dimensions:

Length	5500 mm
Weight	1160 mm
Height	1500 mm

BUTTER PACKAGING MACHINES

BUTTER PACKAGING MACHINE, 6511000000

The automatic machine is designed for packing of butter in aluminum foil or parchment paper. The machines are offered with different capacities, each of them packs the product in predetermined dosing range.

The product loading is carried out through a bunker with screws, made of stainless steel. All surfaces of the machine that are in contact with the product are made of stainless steel and according to the requirements of the European Union.

The machine is offered for packing of butter with different mass: 100-125 g or 180-250 g, or 400-500 g. The capacity is easy adjustable through frequency inverter and depends on the dose and type of packaging (packaging 180-250 g, capacity 35-70 pcs./min). The machine is equipped with a safety system.

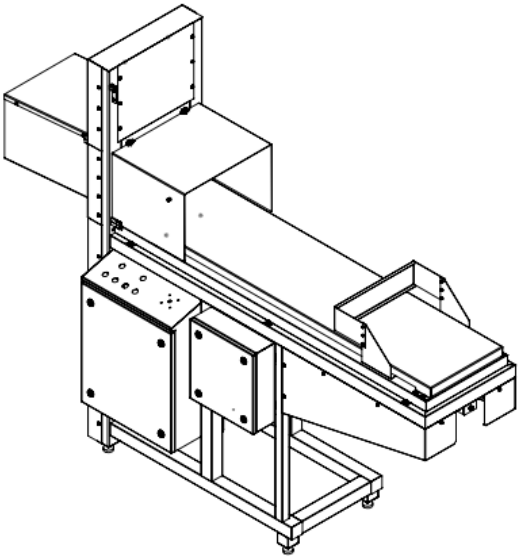


Technical data:

Art. number	6511000300	6511000500	6511000200
Dosing	**100-125 g**	**180-250 g**	**400-500 g**
Capacity	max. 70 pcs/min 40-50 pcs/min nominal	max. 70 pcs/min 40-50 pcs/min nominal	max. 40 pcs/min 20-30 pcs/min nominal
Packaging dimensions	100 g - 75x50x29 mm 125 g - 75x50x37 mm	180 g - 100x75x26 mm 200 g - 100x75x29 mm 250 g - 100x75x37 mm	400 g - 132x75x45 mm 450 g - 132x75x50 mm 500 g - 132x75x56 mm
Hopper capacity	60 kg		
Packaging material	aluminum foil or parchment paper		
Roll diameter	up to 400 mm		
Thickness	0,06-0,08 mm		
Installed capacity of main drive	2,62 kW		
Machine dimensions	2920x2490x1930 mm		
Operating environment	Max. air temperature 30°C Relative humidity at 20°C: max. 75%		

Guillotine for butter cutting, 6831100000

- pneumatically driven knife.



Technical data:

Capacity	max. 1000 kg/h
Block dimensions	380x260x230 mm, 20 kg
Installed power	0,38 kW
Dimensions	2390x680x1850 mm

MACHINES FOR DOSING OF PROCESSED CHEESE

MACHINE FOR DOSING OF PROCESSED CHEESE, 6710000400

The machine is designed for dosing of highly viscous products like processed cheese, salads and similar.

The product is filled in the machine hopper, where special system drives it to the three dosing heads. Transport speed is adjusted by servo motors. A steam jacket ensures to maintain the product temperature. Control unit with touch screen panel allows monitoring of all processes as well as of the product level in the hopper, its temperature etc.



As an option can be offered conveyor for the entrance of the machine, where the cans are disinfected (see Catalogue Conveying equipment).

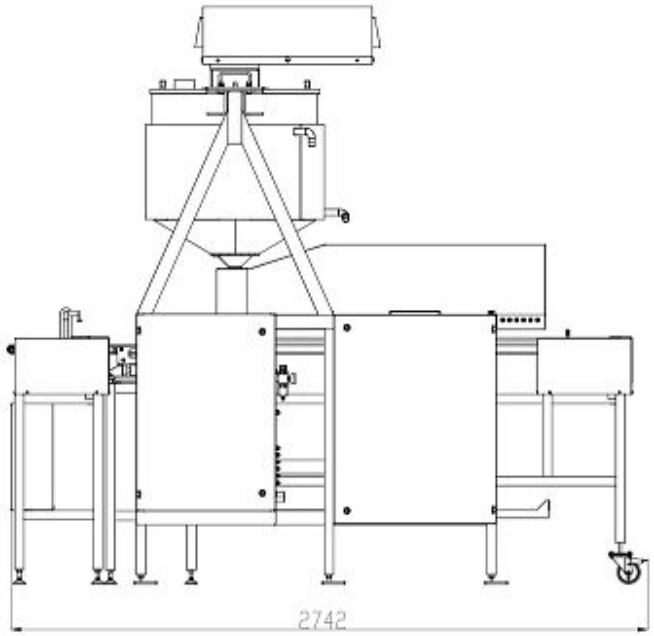
The machine is designed for dosing from 100 up to 500 g, but on clients' request it can be designed for dosing in other limits. The capacity is 6000 pcs./h when dosing 200 g.

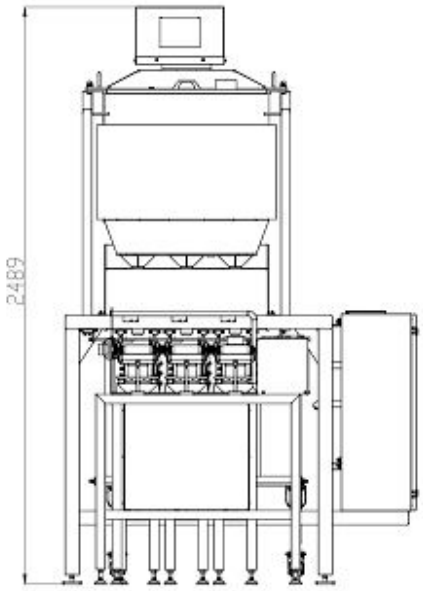
The machine is made of stainless steel 1.4301 (AISI 304).

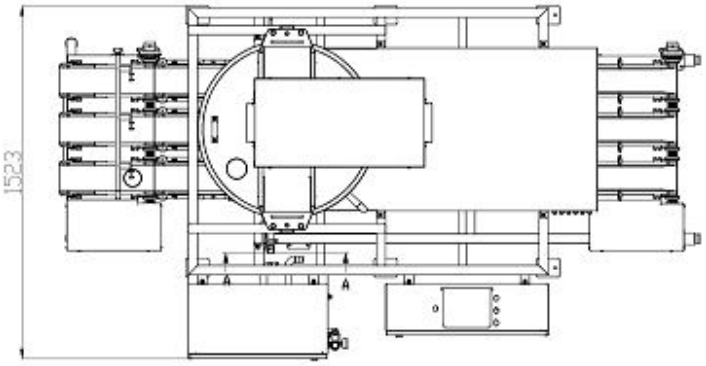


Technical data:

Capacity	6000 pcs./h when dosing 200 g
Dosing limits	100-500 g
Installed power	max. 2 kW
Power supply	3x400V/50 Hz
Compressed air	max. 10 bar
Hot water inlet	¾"
Hot water outlet	½"







Dimensions:

Length	2742 mm
Width	1523 mm
Height	2489 mm

PROCESSED CHEESE PRESS

PROCESSED CHEESE PRESS, 6920010000

The machine is used for separation of milk products from their packings. It is made of stainless steel 1.4301 (AISI 304).

The packed products are placed in tubular container with set of platen on the bottom and after positioning of the container they are pressed from piston. The packings remain in the container and the product is collected in container underneath the machine. The drive is hydraulic station build on the upper part of the machine.

The pressing pressure and the speed can be adjusted depending on the product and its packing.

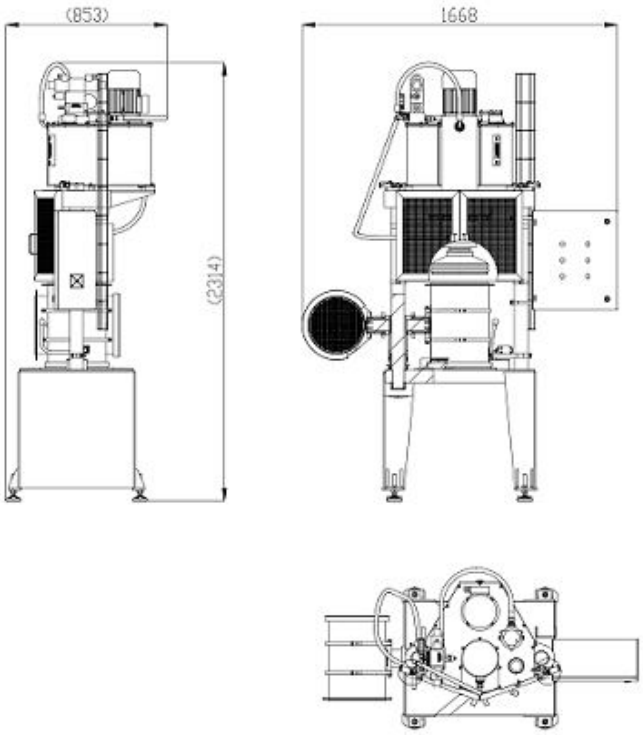
The machine has two tubular containers which allows on one hand operator's safety and on the other – saves technological time allowing loading /unloading/ of one container while pressing products in the other one.

For safety reasons the piston is covered with fence with safety switches and the pressing process cannot be started if the sensor for positioning the container is not activated.



Technical data:

Power supply	3x400V/50 Hz
Installed power	1,16 kW
Max. Pressure	4 MPa
Pressing time (adjustable)	~30 s/dose
Dimensions	1668x853x2314 mm



MIXER FOR CREAM CHEESE

MIXER FOR CREAM CHEESE, 6842601001



The machine is designed for production of cream cheese, melted cheese or similar.

The mixing of the materials is carried out with the help of two shafts with opposite paddles and the transport of the finished mixture with the help of screw pump.

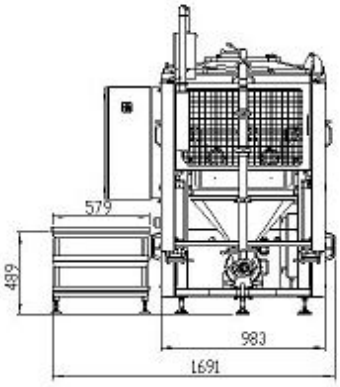
The material for mixing is loaded into the tank and the rotation of the two shafts is started. When ready the mixture is pushed to the hopper of the screw pump, through which it reaches the next operation of the technological cycle.

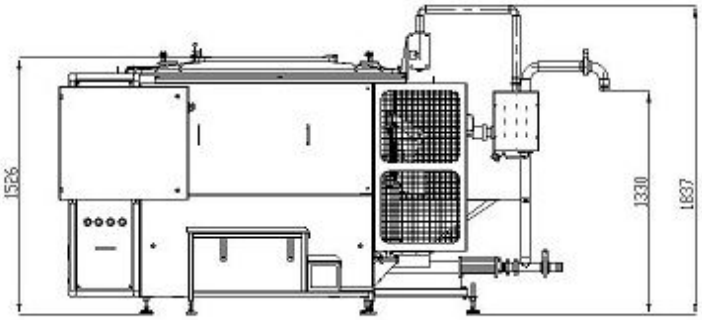
The control unit of the machine allows smooth adjustment of the rotating speed of the shafts and the flow rate of the screw pump. To ensure the safety of the operator, coded magnetic switches are mounted on the lid and the grid, which stop the rotation of the shafts, when opened.

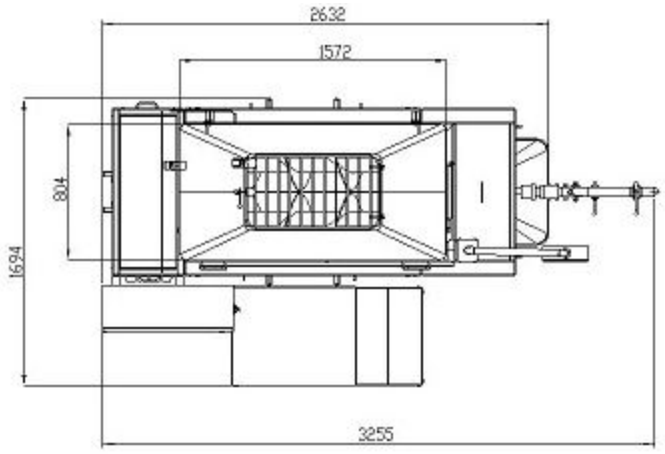
The machine is made of stainless steel 1.4301 (AISI 304).

Technical data:

Working volume	600 l
Output	2,5-3 m^3/h
Pump flow rate	1-4 m^3/h
Power supply	3x400V/50 Hz
Installed power	10,23 kW
Pump capacity	1,5 kW
Shaft motors	2x4 kW
Compressed air	6 bar







Dimensions:

Length	3255 mm
Width	1695 mm
Height	1840 mm

ICE BANK INSTALLATIONS

Storm Engineering SA manufactures ice bank installations battery type with various capacities: from 45 000 to 2 240 000 Kcal with tanks with capacity from 1 400 l to 61 000 l.

Technical characteristics:

- container made of stainless steel with thickness 2 mm;
- polyurethane foam insulation with thickness 85 mm on the walls and 100 mm on the bottom;
- outside shell and top cover of insulated panels;
- steel and zinc bottom;
- painted steel bearing construction;
- stainless steel vapourizer;
- aluminium air mixer with capacity 3 kW;
- cooling installation with electric control, pressure switch and electric protection;
- controller with touch screen;
- electronical regulation of ice gathering;
- control of the cooling fans by pressure switch;
- Bitzer compressor.

An example for 1 440 000 Kcal accomplished project, 61.2921.30:



ADDITIONAL EQUIPMENT



COLUMN LIFTER FOR 200l BUGGY, 3120031635

Fixed execution, with chute for loading of 150l universal cutting and mixing machine.

Lifting capacity: 300 kg
Turning height: 1640 mm
Installed power: 0,8 kW
Power supply: 3x400V/50 Hz
Dimensions: 1160x1150x2950 mm



TANK FOR END PRODUCT, 62401958

The device is designed to take in the end product from 150l universal cutting and mixing machine and transport if to the necessary place for the next operation. For this reason it consists of tank with volume 300 l with water heating jacket and stirrer for homogenizing and screw pump for transportation.

Volume: 300 l
Pump: 1,5 kW
Stirrer rotation: 10 rpm
Installed power: 2,6 kW
Power supply: 3x400V/50 Hz
Dimensions: 3445x1050x1670 mm



CONTAINER FOR CHEESE MATURING, 62.4014.73

Made of stainless steel AISI 316.

Volume: 455 l
Dimensions: 1290x880x680 mm



INSTRUMENT FOR CHEESE CLEANING

Made of stainless steel DIN 1.4301 (AISI 304).

62.4005.50 – working part 60 mm
62.4012.89 – working part 100 mm



INSTRUMENT FOR TIN OPENING, 62.4012.36

Made of stainless steel DIN 1.4301 (AISI 304).